

- 64 -

**Claims:**

1. A use of an inhibitor of PI3Kgamma to prepare a medicament to prevent or treat heart disease.
- 5 2. A use according to claims 1-6 wherein the inhibitor of PI3Kgamma comprises inactive P13Kgamma, an inactive fragment of P13Kgamma, an antibody to PI3Kgamma or an antisense oligonucleotide that inhibits the expression of PI3Kgamma.
- 10 3. A use according to claim 1, wherein the inhibitor of PI3Kgamma is selected from the group consisting of wortmannin, Ly294002, 2-(4-morpholinyl)-8-phenyl-4H-1-benzopyran-4-one (LY294002) and quercetin and derivatives or analogues of the foregoing.
4. A method of medical treatment of heart disease in a mammal in need thereof, comprising administering to the mammal an inhibitor of PI3Kgamma.
- 15 5. The method of claim 4, wherein the inhibitor of PI3Kgamma is inactive P13Kgamma, an inactive fragment of P13Kgamma, an antibody to PI3Kgamma or an antisense oligonucleotide that inhibits the expression of PI3Kgamma.
6. The method of claim 4, wherein the inhibitor of PI3Kgamma is selected from the group consisting of wortmannin, Ly294002, 2-(4-morpholinyl)-8-phenyl-4H-1-benzopyran-4-one (LY294002) and quercetin and derivatives or analogues of the
- 20 foregoing.
7. The use or method of any one of claims 1-6, wherein the heart disease is selected from the group consisting of acute coronary syndromes, cardiac arrhythmias and hypertension.
- 25 8. The use or method of claim 7, wherein the heart disease is selected from the group consisting of: congestive heart failure, angina, myocardial infarction (heart attack) atrial flutter, atrial fibrillation, paroxysmal supraventricular tachycardia and idiopathic hypertrophic subaortic stenosis.
9. A pharmaceutical composition for use in preventing or treating heart disease
- 30 comprising an inhibitor of PI3Kgamma and a carrier.
10. A method for identifying a compound that inhibits the binding of a PI3Kgamma protein to its substrate for treatment of heart disease comprising:

- 65 -

- a) incubating (i) a candidate compound; (ii) an PI3Kgamma protein and (iii) an PI3Kgamma substrate under conditions which permit the binding of PI3Kgamma protein to the substrate; and
  - b) assaying for complexes of PI3Kgamma protein and the substrate or metabolites thereby produced and comparing to a control, wherein a reduction of complexes or metabolites indicates that the candidate compound has an effect on the binding of the PI3Kgamma protein to the substrate;
  - c) determining whether the candidate compound is useful for treatment of heart disease.
- 10 11. A compound identified according to claim 10.